Façade Consulting

& Engineering

West Side Place -Melbourne, VIC, Australia.

OPPORTUNITIES Through Excellence

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BG

### BG&E

BG&E is a globally renowned civil and structural engineering consultancy celebrated for its innovative, costeffective, and award-winning designs.

With a dynamic team spanning 15 offices worldwide - including Australia, New Zealand, South East Asia, the United Kingdom and Middle East - we unite local and international professionals to deliver practical solutions with a strong focus on constructability.

Our Clients consistently return to us, attesting to our exceptional service, responsiveness, and track record for delivering tailored solutions for technically challenging projects. The quantity and scope of engineering awards we've received acknowledge our diverse industry contributions and the exceptional quality of the services we deliver across a host of regions, disciplines, and sectors.



# Façade Consulting & Engineering

Luminous, geometric, and robust façades pepper our urban landscapes, but growing complexity and performance demands on buildings are placing pressure on the most ambitious façade designs and engineering.



Fiona Stanley Hospital -Perth, WA, Australia.

BG&E Façade Consultants have achieved worldwide recognition for providing innovative solutions that encompass façade design, architectural detailing and engineering, thermal performance, materials science, remediation, and recladding.

We appreciate that the Façades of buildings are one of the most important, and at times expensive, components of a new build - which makes their role vitally important.

Our team enables us to deliver a truly multidisciplinary service to our Clients. Our talented team includes:

- · Architects.
- · Structural Engineers.
- Mechanical Engineers.
- Materials Science Specialists.
- · Building Physicists.
- Façade Designers.

#### BG&E FAÇADE CONSULTING & ENGINEERING



Working as proactive members of design and construction teams, we help Clients deliver beautiful buildings that provide optimal outcomes for owners, occupants, visitors, and tenants.

Our project work maintains a diversity of Client groups, enabling us to understand the needs of the various members of the design and construction team - we are currently working with developers, main contractors, and as expert witnesses.

Our practice has its roots in the architectural profession, and we see our work with architects as a central part of our consultancy.

We believe that we have an active role to play in enabling the visual aspirations of a project to be met by informing the design process with our knowledge of sustainability benchmarking, precedent, costs, manufacturing techniques, buildability, and technical performance.



Addax Tower, Abu Dhabi – United Arab Emirates.

### Façade Consultancy Services

BG&E Façade Consultants provide a proactive, innovative approach to design - encompassing architectural engineering and materials science skills and a comprehensive understanding of fabrication, installation and procurement issues.

It is these skills which enable our team to deliver a high-quality service to our Clients and give us the capacity to deliver technically challenging projects across a diverse range of environments.

#### **NEW BUILD**

- · Strategic conceptual advice.
- Concept design.
- · Schemstic design.
- · Detailed design documentation.
- Façade tender documentation.
- · Construction phase services.
- · Manufacture facility inspections.
- · Performance testing and inspection.
- · Field water testing witnessing.

#### BG&E FAÇADE CONSULTING & ENGINEERING

#### **FAÇADE ENGINEERING**

- · NCC compliance.
- Expert witness.
- Therm and WUFI assessments.
- Compliance certifications (e.g. Reg 126, DBP, Form 15, P1 and P2 Services (NZ)).
- Peer review, façade engineering and wind assessment.
- · Glass design.
- Structural glass façade systems.
- Façade system (e.g. curtain wall, window wall, shop fronts, etc.) system design.
- Condition inspection and reports.
- AAMA501.2 site hose test witnessing (i.e. water leak testing).
- F3P1 Assessment Performance Solution Report.
- F3P1 Performance Solution Pathway Report.
- F3P1 Certification.
- Façade conservation.

#### **SPECIAL & OTHER SERVICES**

- Recladding, review, design and waterproofing assessment.
- Remedial.
- Glass failures.
- Façade attachment failures.





University of Melbourne, New Student Precinct - Melbourne, VIC, Australia.

**OUR APPROACH:** 

### Sustainability & Innovation

## BG&E Façade Consultants have a keen interest in energy efficiency and sustainability - an area in which we take a leading role in the consulting industry.

BG&E Façade Consultants understands the importance of the façade concept, façade systems, materials, and energy efficiency of the façade.

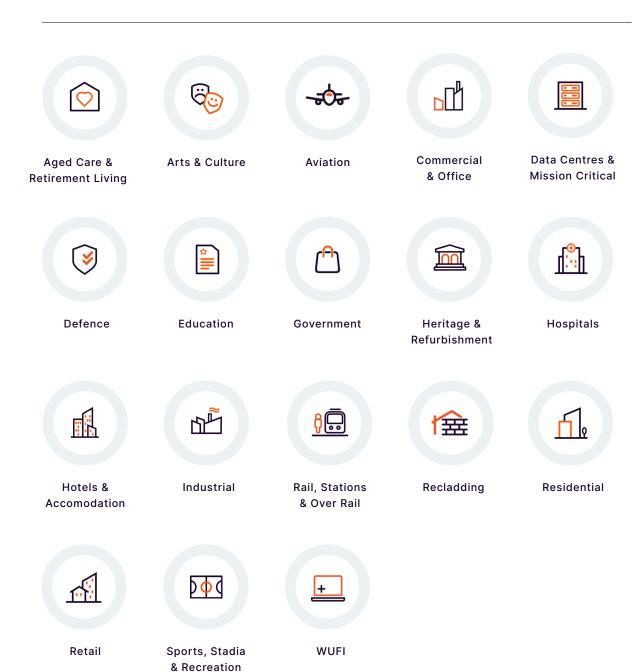
At the commencement of our engagement, a review of the brief, performance requirements, and architectural design intent is carried out to establish best practice outcomes and seamless delivery.

Our approach to delivering the project will include:

- Proactive engagement with the design team to understand the design intent and the limitations of proposed materials, based on aesthetics, constructability, cost, and design risks involved.
- Detailed understanding of total system performance including thermal performance, compatibility of materials, structural performance, and long-term durability.
- Comprehensive advice on available glass products to meet thermal performance, durability, daylight, and procurement requirements.
- Drawing on diverse backgrounds and experiences, our team is equipped to advise on matters like constructability, ensuring the procurement of a cost-effective façade that meets the design intent and is built to the highest standards.

### Industry Sectors We Service

We endeavour to explore, together with the design team, the available cutting-edge technology where material limitations are pushed to the limits.



### **Our Expertise**

What sets BG&E Façade Consultants apart is our extensive experience and knowledge base.

#### **KEY BENEFITS**



Seasoned experts with 25+ years of experience in their respective fields and regions.



Equipped to advise on matters like constructability - ensuring the procurement of a cost-effective façade.



Diverse team, including architects, structural and mechanical engineers, materials science specialists, building physicists, and designers, offers a comprehensive service to Clients.



Recognition for award-winning projects - which underscores our commitment to excellence.



Leader in the consulting industry in the areas of energy efficiency and sustainability.



Comprehensive advice on available glass products to meet thermal performance, durability, daylight, and procurement requirements.







At BG&E, we are united by a common purpose – we believe that truly great engineering takes curiosity, bravery and trust, and is the key to creating extraordinary built environments.

Our team of more than 1100 highly skilled people, in offices across Australia, New Zealand, Singapore, the United Kingdom and Middle East, design and deliver engineering solutions for Clients in the Property, Transport, Ports and Marine, Water, Defence, Energy and Resources sectors.





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